

1969 ANNUAL REPORT

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NATIONAL STARCH AND CHEMICAL CORPORATION

DIRECTORS



Left to right; Gordon Grand, Jr., William F. Laporte, Henry A. Correa, Sidney F. Thune, Edward B. Conway, Carlyle G. Caldwell, Donald D. Pascal, Frank K. Greenwall, Bernard H. Schulist, William A. Mitchell, Oscar M. Ruebhausen, Robert W. Merritt, John F. Fitzgerald.

NATIONAL STARCH AND CHEMICAL CORPORATION ANNUAL REPORT

FOR THE YEAR ENDED DECEMBER 31, 1969

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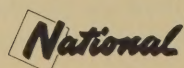
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We hope you will find this material of interest.

(No acknowledgment is expected)

JOHN C. CLAY

Assistant to the Chairman



NATIONAL STARCH AND CHEMICAL CORPORATION

	1969	1968
.....	\$128,057,991	\$125,630,958
.....	\$ 16,267,720	\$ 18,369,635
.....	\$ 7,877,730	\$ 9,046,921
.....	\$ 8,389,990	\$ 9,322,714
.....	\$ 4,733,406	\$ 4,876,074
.....	\$ 236,250	—
.....	\$ 3,378,695	\$ 3,037,190
.....	\$ 9,095,190	\$ 10,951,815
.....	\$ 47,413,873	\$ 42,345,327
.....	\$1.37	\$1.54*
.....	\$.58	\$.53*
.....	5,792,561	5,758,848*
.....	3,296	2,994

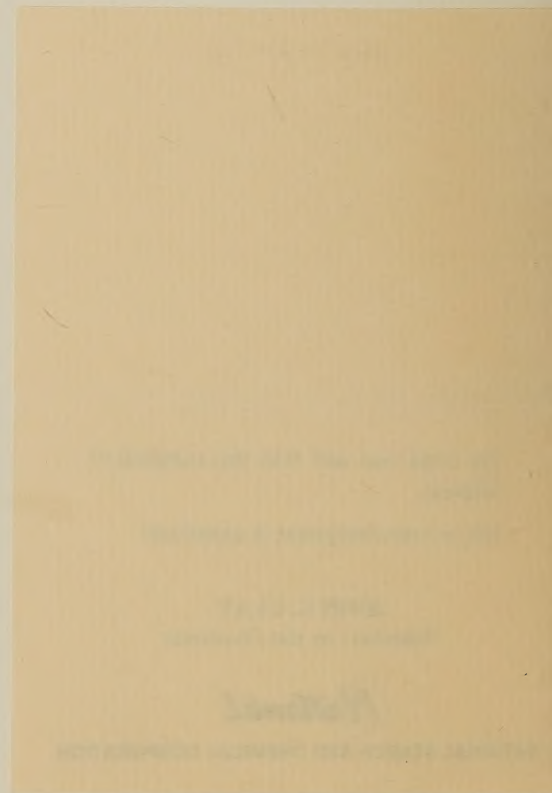
rch 31, 1969.

Operations of Proctor Chemical Company, Inc. are included for 1968 and 1969.

DIRECTORS



Left to right; Gordon Grand, Jr., William F. Laporte, Henry A. Correa, Sidney F. Thune, Edward B. Conway, Carlyle G. Caldwell, Donald D. Pascal, Frank K. Greenwall, Bernard H. Schulist, William A. Mitchell, Oscar M. Ruebhausen, Robert W. Merritt, John F. Fitzgerald.



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Offices, Laboratories, Plants	Inside Back Cover

Comparative Highlights

	1969	1968
Net sales	\$128,057,991	\$125,630,958
Earnings before income taxes	\$ 16,267,720	\$ 18,369,635
Taxes on income	\$ 7,877,730	\$ 9,046,921
Net income	\$ 8,389,990	\$ 9,322,714
Depreciation	\$ 4,733,406	\$ 4,876,074
Cash dividends: preferred	\$ 236,250	—
common	\$ 3,378,695	\$ 3,037,190
Capital additions	\$ 9,095,190	\$ 10,951,815
Plants, properties and equipment (net)	\$ 47,413,873	\$ 42,345,327
Earnings per common share	\$1.37	\$1.54*
Cash dividends per common share	\$.58	\$.53*
Average shares of common stock outstanding	5,792,561	5,758,848*
Number of common stockholders	3,296	2,994

*Adjusted for 3 for 2 stock distribution made on March 31, 1969.
Operations of Proctor Chemical Company, Inc. are included for 1968 and 1969.

To our Shareholders:



Donald D. Pascal

Although sales in 1969 continued a 17-year record of successive increases, earnings declined for the first time in this period. Sales increased by 2% to \$128,057,991 while earnings fell by 10% to \$8,389,990. Per share earnings dropped from \$1.54 to \$1.37.

The modest sales increase in 1969 failed to offset narrower profit margins resulting from higher costs of raw materials and labor plus unusual competitive pressures. Starch margins, particularly, showed the effects of increased corn costs with no offsetting selling price increases for many of our starch lines. The Canadian operation was affected by substantial start-up costs in connection with the new starch plant at Collingwood, Ontario, and the effects of a six-week strike at Toronto early in the year. Start-up costs were also incurred with respect to the new polyelectrolyte (Natron) plant at Meredosia, Illinois, and the new hot-melt adhesive installation at Plainfield, New Jersey. All three of these new facilities, except part of the hot-melt plant, are now in operation and all should be contributing to earnings in 1970.

The international companies, both consolidated and unconsolidated, all reported higher sales and, except for the Canadian and English subsidiaries, higher earnings. The joint ventures, which reported significant profit improvement, are not consolidated and our reported income includes only the dividends received.

As previously reported, 1969 earnings reflect a substantial loss on the sale of a portion of inventory of a raw material involving commitments well in advance of use, and also a restoration to earnings, of about the same magnitude, of depreciation and related investment credit resulting from an agreement with the Internal Revenue

Service as to the useful life of certain fixed assets.

A three-for-two split of the common stock in the form of a 50% stock dividend was voted by the Board of Directors on February 3, 1969. For each two shares outstanding, one additional share of common stock was distributed on March 31, 1969 to stockholders of record on March 10, 1969. On April 28, 1969, the Board declared a quarterly cash dividend of 15 cents per share for payment in May. This rate which represented an increase of 12.5% over the previous rate, has been continued through the first quarter of 1970.

On June 4, 1969, the Company acquired Proctor Chemical Company of Salisbury, North Carolina for 105,000 shares of a new convertible preferred stock. This stock carries a \$4.50 cumulative dividend rate, is convertible into common stock at a price of \$45.33 per common share and has a liquidating value of \$100 per share. Proctor was acquired on a pooling-of-interests basis but the adjustment of the Company's income statements for 1968 and 1969 to include Proctor has had only minor effects on net income available for the common stock. Proctor makes fabric finishing and other proprietary chemicals sold to the textile industry and also makes other organic chemical specialties. Proctor has underway a major plant expansion program, involving over \$1,000,000, which will permit the production of some new products and an increase in production of some of its present lines. This new investment is expected to begin to yield profits by the end of 1970.

The Company continued in 1969 to make substantial investments in research and development aimed at both new products and process improvements designed to reduce cost, to improve quality or to meet the requirements of



Carlyle G. Caldwell

particular markets. Expenditures were over \$6 million, an all-time high. Based on a study for the year 1968, approximately 35% of the Company's sales, excluding by-products, consisted of new products introduced in the previous 10 years, and over 60% consisted of these new products and of modifications and reformulations of established products made in the previous decade to adjust to changing conditions and customer requirements. Plans to build new laboratory facilities at Berkeley Heights, New Jersey have been delayed pending further consideration of certain aspects of the proposed expansion.

Capital expenditures in 1969 came to \$9,095,190, a little higher than the average of recent years. In addition to the new Collingwood plant, major projects included the Natron and hot-melt installations, a new adhesive plant in Buffalo and a substantial expansion of specialty starch refining capacity at Plainfield. Capital expenditures in 1970 are expected to be somewhat less than in 1969 and will include the Proctor expansion previously mentioned, expanded facilities for the LePage's Ltd. operation in Canada, completion of the resin plant in Australia and a variety of additions to domestic production and warehousing capacity.

Under the Stock Ownership Incentive Plan approved by shareholders at the 1969 annual meeting, grants of 24,900 shares were made in 1969 to 45 key employees, including officers. As called for by the Plan, these shares are subject to various restrictions which, generally, are removed as to half the grant, at the rate of 10% per year after ten years and, as to the remaining half, removed entirely at normal retirement age.

Each year brings its own quota of unexpected and largely unforeseeable events and trends, favorable and un-

favorable. In 1969, we believe, there was an unusual overbalance of unfavorable factors. We have reviewed this experience in the light of a possible slowdown in 1970 in both the economy and the rate of inflation. Our research and development, manufacturing and sales capacities are greater than ever. Upgrading of our product mix is being intensified to offset further cost increases and competitive pressures. There appears to be a strengthening in starch prices which, if maintained, along with indicated 1970 corn costs, should result in an improvement in starch margins. All cost control programs have been reviewed, and we should operate more efficiently and with relatively small overhead cost increases. In the light of these factors and assuming no significant recession, we feel that 1970 operations will see a return to our past record of progress.

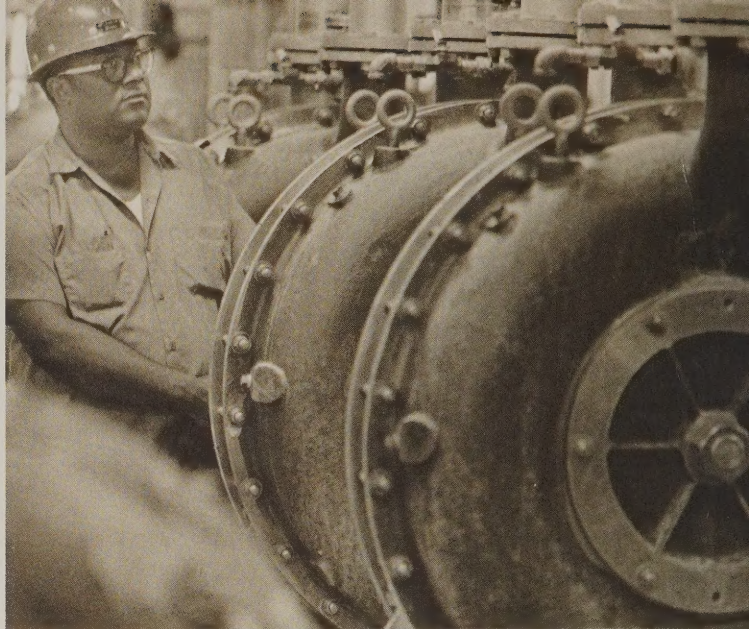
In closing, we wish to convey once again our appreciation and thanks to all the National people, including our customers, suppliers and many advisers—a team whose talent, effort and dedication have made our past progress possible and on whom we depend for continued progress.

February 25, 1970

Donald D. Proctor *Carlyle G. Caldwell*

Chairman of the Board

President



OPERATIONS REVIEW

Adhesive and Resin Divisions

Completion at mid-year of the first major phase of our new hot melt adhesive manufacturing plant in Plainfield, N.J., has enabled us to make significant progress in the general packaging, bookbinding and industrial hot melt areas.

The new facility permits production of exceptionally pure and uniform products. Most other hot melt manufacturing methods can not achieve this level of purity and often result in grit-clogged applying equipment.

In addition, where there was often a confusing variety of hot melt forms, shapes and sizes, we now offer two forms — pellet and slat — for virtually all packaging and converting applications. These include case and carton sealing, tray making, laminating, bag seaming, labeling and others. During 1969 three hot melt patents were obtained and several more are being processed.

Products designed for the fast growing flexible packaging field continue to increase in numbers and sales. At mid-year a new primer was introduced for the extrusion of polyethylene on aluminum foil, polyester film, PVDC-coated film and papers, cellulose and other substrates.

Other packaging adhesives introduced during 1969 include a hot melt for year-round labeling of jars and cans which replaces previously necessary summer and winter grades; a rubber latex for adhering polyethylene to kraft paper in the manufacture of multiwall bags, and a new thermoplastic for binding soft cover books. In addition, there was continued growth in the usage of our materials in envelopes, bags and high strength pressure sensitive products.

Rapidly changing furniture and woodworking adhesive needs are being met by new thermosetting adhesive sys-

tems. In 1969 we introduced a new Instant-Lok® hot melt for automatic edge banding of plastic laminate and wood veneers. This fast setting adhesive permits furniture makers to utilize the full potential of new high speed woodworking equipment.

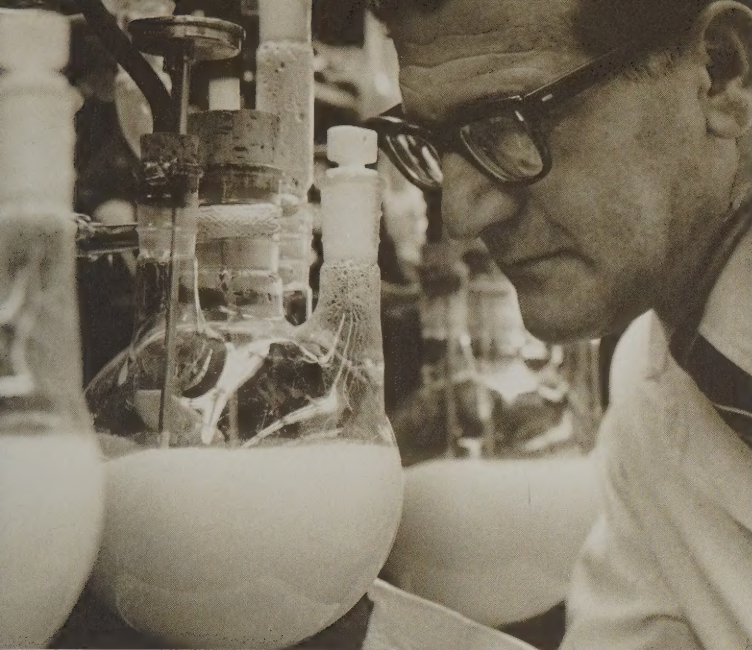
Another well accepted thermosetting emulsion introduced in 1969 offers up to 40% faster hot press veneer laminating or high pressure laminating to particle board or plywood. Our proven Kor-Lok®, Duro-Lok® and Ply-Lok structural adhesive systems continued to grow in acceptance and volume, particularly in the modular and mobile home field.

In cosmetics, the market trend to high-hold hair sprays has enabled us to strengthen our position in retail and salon aerosol products. Late in 1969 the introduction of an ultra-violet absorbing hair fixative for hair sprays, wave setting lotions and hair conditioners aroused a great deal of interest.

Non-aerosol markets for wave sets, conditioners and finishing sprays have grown significantly and provided excellent sales increases for our aqueous-alcoholic binder systems.

The non-woven textile and new process "disposable" industries are growing rapidly. Our adhesives and resins are becoming more widely used in such disposable products as diapers, hospital gowns and bed covers.

The trend in paints and coatings continues toward greater use of water based products. National's experience with latex binders is being applied to product areas that have traditionally used solvent bases. Areas of growth include fire retardant paints, exterior trim paints, metal main-



tenance coatings, antiquing kits and compounds for caulking, patching and grouting.

Our polymers are finding increased acceptance in diazo blue-printing and new products continue to be developed for the rapidly growing reprographic copy paper market. Other resin products introduced in 1969 are finding applications in vinyl flooring, wood prefinishing and automotive dielectrically bonded vinyl panelling.

In addition to the new hot melt adhesive facility at Plainfield, our network of regional adhesive plants was expanded with the opening of our Buffalo, New York plant in February 1970. This brings to twelve the number of regional adhesive plants located in major markets to provide better delivery and customer service.

Research efforts in all adhesive and resin areas are aimed toward anticipation of future customer needs and exploration of new raw materials to ensure continued product line expansion.

Starch Division

Completion at mid-year of a 25,000,000/lbs. per year capacity plant at Meredosia, Illinois, has permitted major marketing emphasis on Natron 86, our polyelectrolyte flocculant for water treatment.

Natron 86 is suitable for many industrial drainage, clarification and flocculation applications. Early sales efforts for Natron 86 were concentrated in the paper industry, but emphasis is also being extended into a number of other industries with water treatment problems.

National's strong position in the papermaking industry has been strengthened by wider acceptance of cationic

starches and the introduction of a number of new products. Presently under development is a new product and application technique which may permit a more significant use of starch in major grades of paper that do not now use starch extensively.

Cato-Bond® and Cato-Size® are among the wide range of National cationics which are enabling papermakers to upgrade their lines through increased paper strength and improved printability. Cato-Size has also proven successful in reducing mill effluent BOD, a major cause of water pollution.

Resyn® 1105, a new vinyl acetate coating resin for web offset stock, was introduced to the paper industry this year. It is also expected to become a major component in coating formulations for boxboard, bleached kraft, roto publication and sheet fed offset stocks.

R-68, our replacement for rosin and other synthetic sizing agents used in papermaking was commercially introduced in 1969 after extensive testing. We have broad patent coverage on this use of R-68 and although it will take several years to fully develop, R-68 is expected to provide a major new market within the paper industry.

The snack food market continues to grow at a faster rate than the food market in general. National's Baka-Snak® and Fry-A-Snak have allowed snack processors to formulate unique new products and a number of major food companies are presently market testing products using these starches as the prime textural components.

National's Textaid® has been granted broad patent coverage and substantial sales for this specialty food starch are now developing in various segments of the food

industry including canned foods, frozen dinners, bakery products, and pet foods.

Crisp Film®, as its name implies, improves the crispness of many products, and significant new applications have been developed for this product in snacks and specialty potato products.

Instant Clearjel® sales continue to grow as this most versatile of all pregelatinized starches is adopted for more and more applications in and out of the bakery field.

In the textile industry, National's improved binders for various types of non-woven fabrics used in jacket linings, paddings and cushion materials, showed progress. Resin adhesives for laminated textiles and components for non-woven fabrics were also introduced.

The acquisition, in June, of Proctor Chemical Co., a leading supplier of chemicals for permanent press, easy care fabrics, has solidified and expanded the company's position in the textile industry.

During 1969 the market for gummed tape continued to expand. Sales of Tapon, an economical and improved replacement for animal glues in these tapes, expanded along with the market.

The growing worldwide demand for water resistant corrugated board for boxes used to pack and ship fish, poultry, vegetables and other perishables that must stand refrigeration and excessive handling, increased volume for Nabond®.

Divisional emphasis in research has been on exploring potential starch usage in new markets. In manufacturing, our new corn refinery at Collingwood, Canada, went on stream in September of 1969, and as previously mentioned, our polyelectrolyte plant at Meredosia, Ill. was completed in June.

International Division

Each of the company's international consolidated subsidiaries showed new records in sales during 1969. However, profits for our Canadian and English operations were lower. Canada was affected by start-up costs associated with the new starch refinery at Collingwood and the impact of a strike in Toronto, while England was affected by a number of unusual non-recurring expenses. All other international operations achieved increased profit levels for 1969.

National Starch and Chemical Co. (Canada) Ltd. showed increased sales on expanded specialty starch and adhesive marketing efforts. The new starch refinery at Collingwood, described elsewhere in this report, has been on stream since September 1969. This facility, along with a new adhesive manufacturing plant being planned for Vancouver, will permit continuation of this growth.

LePage's Ltd., our Canadian packaged goods operation showed record sales but only slightly improved profits due to an increase in fixed costs and large modernization expenditures in the manufacturing area. Late in 1969, Norman F. Riley, President of National in Canada was also named President of LePage's operations, replacing Brian Newey, who retired. LePage-Stacote, an adhesives joint venture, was established in Jamaica, British West Indies, early in 1969.

Among other wholly-owned subsidiaries, National Adhesives and Resins Ltd., England showed higher sales, but reduced earnings from the 1968 record level. National Starch and Chemical de Mexico achieved both record sales and earnings. Manufacturing facilities there are being expanded through installation of new hot melt and solvent-based adhesive equipment. In addition, a new reactor is in the planning stage. Inter-National Adhesives and Resins, Australia, completed construction of new office, laboratory and adhesive manufacturing facilities during 1969 and expects completion of a new resin polymerization plant in mid-1970. Inter-National achieved record sales and profits in 1969.

Early in 1969, we acquired 50% of the stock of Bericol, S. A., an adhesive company in Lyon, France. Bericol achieved record sales and profits in 1969 and has taken an option on a new site to accommodate expected growth.

All joint ventures, Laing-National, England; Roquette-National Chimie, France and Delft-National Chemie, Holland, achieved sales and profit records this year, as did our affiliated company in South Africa, Technical Adhesives and Chemical Products (Pty.) Ltd.

In addition, Delft-National installed a new resin reactor and its new hot melt adhesive facility came on stream early in 1970. Equipment modifications to permit the production of solution polymers should be completed by the middle of 1970.

PRODUCTS AND MARKETS

The diversity of our products is reflected in the diversity of our markets. Corporate emphasis in research, product development and marketing continues to be on specialty starches, resins and adhesives which in turn offer new marketing, product and manufacturing advantages to the expanding industries we serve.

Water Treatment

Our polyelectrolyte flocculant, Natron 86 for water treatment, is used by the paper industry in water and solids re-use, effluent clarification, BOD reduction, raw water treatment and other applications. The benefits of Natron 86 are presently being extended to other industries where inadequate treatment of process water poses a threat to our natural environment.





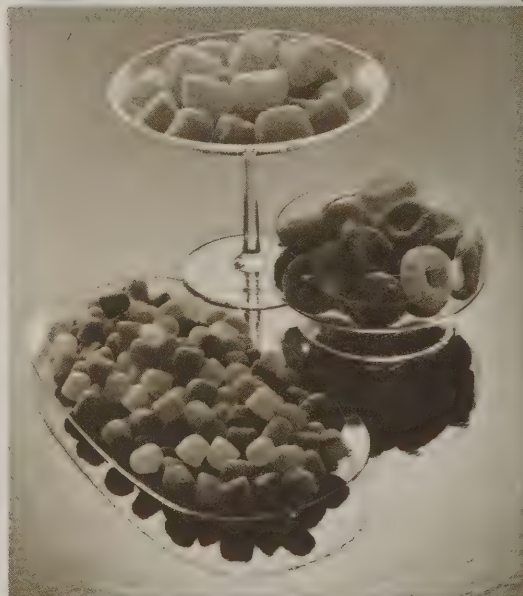
Paper

The magazines, brochures and other paper products we see and use every day provide an extensive and growing market for National. Our cationic starches and resin products, used in every phase of the papermaking process, provide many of the features demanded by publishers, printers, packagers and consumers. The need for new publication stocks that will permit high quality color reproduction, allow no show-through of printing from the opposite page and be light enough to hold down postage cost is an example of the critical demands faced by papermakers.



Food

Specialty food starches continue to represent a growing market for National. Long available ingredients for baking and general food processing have been supplemented by numerous new products for confections, pet foods, snacks, salad dressings, soft drinks, fried foods, puddings and many others.



Adhesives

Although the packaging industry, with its rapidly-changing requirements and innovations, represents the major portion of our adhesive effort, the market in furniture and woodworking continues to grow rapidly. Mobile homes, one answer to the nationwide housing shortage, represent one of the fastest growing segments of this market. The demand for furniture of all types and styles corresponds with our growing population and affluence. In these, as in other areas, new hot melt adhesives, thermosetting emulsions and other adhesive forms are replacing some of the traditional joining and fastening methods used by manufacturers.

Paints and Coatings

Water base paints, long limited to interior flat coatings, are growing in acceptance for exterior trim work and glossy finishes on homes and other structures. National's latex bases for these products, and a growing fire retardant coating market represent the foundation for the Company's present work in paint development.



Textiles

National's position in the textile industry was established on sizing starches for weaving. Recent developments in textile finishing products coupled with the acquisition of the Proctor Chemical Company have broadened and solidified that position. Proctor's line of permanent press, soil release and fabric softening chemicals is well known to textile finishers.

Cosmetics

Population growth, the demand for convenience products and an intensifying awareness of how we look have had a sharp effect on the cosmetic industry. National resin bases for hair spray, wave setting lotions and makeup have shown more than corresponding growth.

A new hair fixative, introduced by National this year, contains a UV absorber designed to protect hair from fading or drying out under the sun's rays.

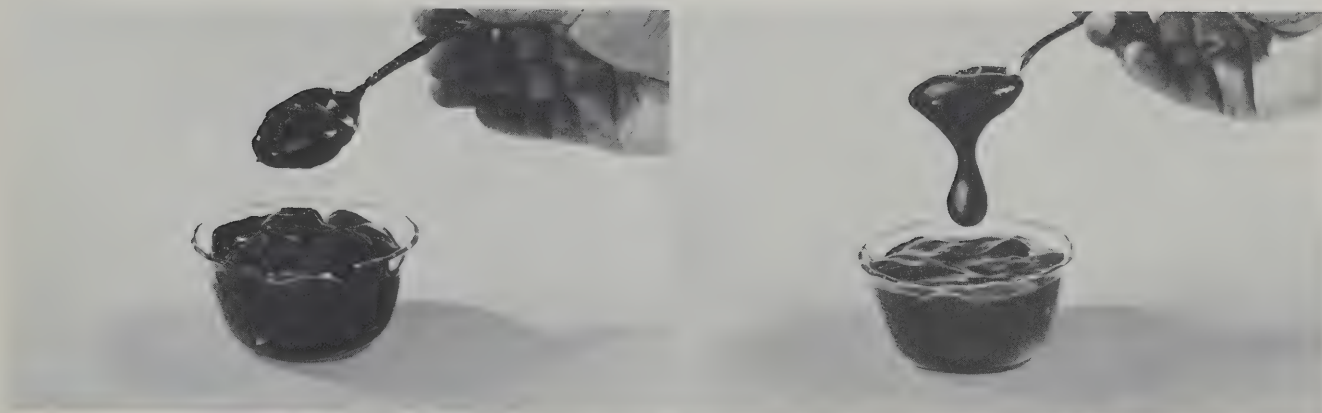
RESEARCH AND DEVELOPMENT

Emphasis on research underscores the Company's progress since its earliest days. Each major division is responsible for research efforts within its market and present raw materials area. A central research group explores new raw material sources with a view toward new product lines for existing as well as new markets.

Hot Melt Adhesives

New hot melt adhesive in slat form being placed in a hot melt applying unit. Adhesive research combined with new manufacturing techniques and process developments have resulted in our new hot melt line. The slat form and our new pellet form can now replace the extensive variety offered to hot melt users.





Pure-Flo For Puddings

Increasing consumer demand for convenience desserts prompted research and development work on Pure-Flo. It gives canned puddings a smooth, creamy texture that is firm and spoonable (left). Puddings prepared with conventional thickeners (right) have a more pourable texture and are less resistant to modern processing methods and storage.

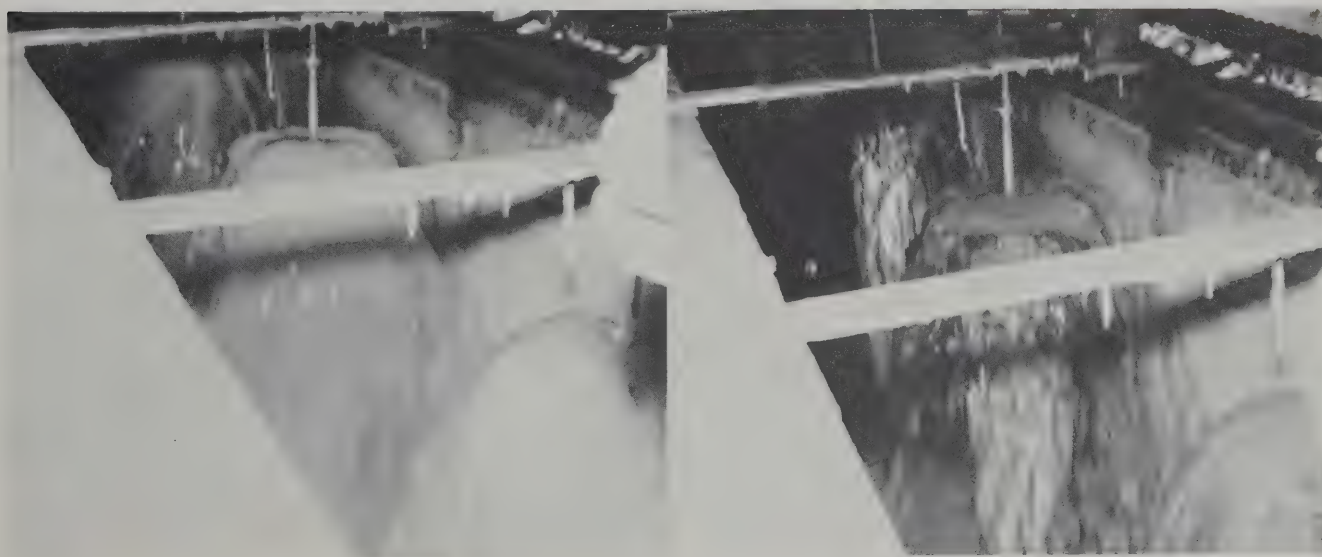
UV Absorbing Hair Spray Resin

Testing of the ultra violet absorbing characteristics of our new hair spray resin is conducted in this UV accelerometer at National's Alexander Laboratories in Plainfield, New Jersey. Many other testing methods are also used including outdoor exposure of hair for extended periods.



Natron

This comparison shows the clarification of process water in a paper mill save-all by our polyelectrolyte flocculant, Natron 86. The milky water (left) contains fibrous materials which have been removed (right) by Natron 86.



NEW FACILITIES

New and expanded plants, offices and research facilities reflect the Company's growth over the years. Major 1969 additions to our growing list of worldwide facilities are shown on these pages.

Collingwood, Canada

A special train carried customers, press representatives and officials to the dedication of our corn refinery at Collingwood, Ontario, in October.





Salisbury, North Carolina

Modern research laboratories of the Proctor Chemical Company, Salisbury, North Carolina. This 1969 acquisition strengthens our position in the textile finishing market.



Buffalo, New York

Our 30,000 square ft. facility in Buffalo, New York is the twelfth in our nationwide network of regional adhesive plants. It was started-up in February, 1970.

Meredosia, Illinois

Our new polyelectrolyte plant in Meredosia, Illinois, went into operation at mid-year. Polyelectrolytes are used in a variety of water treatment applications.



Lyon, France

In 1969 a joint venture was established with Bericol, S.A., an adhesive company in Lyon, France.



Sydney, Australia

Inter-National Adhesives and Resins Pty. Ltd., Sydney, Australia completed construction of its new office, laboratory and manufacturing facilities.



Statement of Consolidated Income

	<i>For the Year ended December 31,</i>	1969	1968
Net sales		\$128,057,991	\$125,630,958
Cost of sales		88,598,793	85,171,048
Gross profit		39,459,198	40,459,910
Selling, general and administrative expense		22,602,414	21,391,508
Operating profit		16,856,784	19,068,402
Other income		1,620,825	1,322,627
Total income		18,477,609	20,391,029
Other charges		2,209,889	2,021,394
Income before provision for taxes		16,267,720	18,369,635
Provision for estimated federal, foreign and state taxes on income		7,877,730	9,046,921
Net income		8,389,990	9,322,714
Preferred stock dividend requirement		472,500	472,500
Net income applicable to common stock		\$ 7,917,490	\$ 8,850,214
Net income per common share (Conversion of preferred stock would not be dilutive)		\$1.37	\$1.54

Statement of Consolidated Retained Earnings

	<i>For the Year ended December 31,</i>	1969	1968
Retained earnings, January 1		\$ 30,156,067	\$ 32,020,111
Net income		8,389,990	9,322,714
Total		38,546,057	41,342,825
Dividends:			
Common stock:			
Cash		3,378,695	3,037,190
Stock (transferred to capital accounts)		—	8,042,468
Preferred stock		236,250	—
Subsidiary company's dividend prior to acquisition		54,150	107,100
Total		3,669,095	11,186,758
Retained earnings, December 31,		\$ 34,876,962	\$ 30,156,067

Note: The accompanying financial notes are an integral part of these statements.

Consolidated Balance Sheet

ASSETS	<i>December 31,</i>	1969	1968
Current Assets:			
Cash	\$ 3,797,096	\$ 4,734,837	
Marketable securities, at cost (market value \$567,965 and \$692,635) . . .	526,353	526,449	
Accounts receivable:			
Trade	14,515,490	13,145,750	
Other	2,097,203	2,680,992	
Inventories, at lower of average cost or market:			
Finished goods	12,571,597	11,526,723	
Raw materials and supplies	9,938,448	8,310,138	
Total Current Assets	43,446,187	40,924,889	
Investments at cost (note 1)	2,179,932	2,235,159	
Property at cost:			
Land	1,815,839	1,670,386	
Buildings and improvements	19,223,668	17,311,124	
Equipment	59,607,961	52,251,299	
Construction in progress and other	3,924,332	4,490,368	
Total	84,571,800	75,723,177	
Less accumulated depreciation and amortization	37,157,927	33,377,850	
Property — net book value	47,413,873	42,345,327	
Other Assets	2,432,194	1,422,407	
Total	\$95,472,186	\$86,927,782	
LIABILITIES			
Current Liabilities:			
Notes payable to banks	\$ 3,227,551	\$ 750,000	
Long term debt due within one year	3,043,072	1,943,075	
Accounts payable	3,731,130	4,645,358	
Accrued taxes	2,743,459	4,133,279	
Accrued expenses	2,172,882	2,315,109	
Total Current Liabilities	14,918,094	13,786,821	
Long Term Debt Maturing After One Year	14,052,896	12,999,231	
Deferred Income Taxes and Other Credits	989,593	644,937	
Stockholders' Equity:			
Preferred stock (liquidation value \$10,500,000)	105,000	105,000	
Common stock	2,934,046	1,938,917	
Paid-in surplus	29,096,935	28,798,149	
Retained earnings	34,876,962	30,156,067	
Total	67,012,943	60,998,133	
Less treasury stock at cost	1,501,340	1,501,340	
Total Stockholders' Equity	65,511,603	59,496,793	
Total	\$95,472,186	\$86,927,782	

Note: The accompanying financial notes are an integral part of this statement.

FINANCIAL NOTES applicable to 1969 financial statements

1. The consolidated statements include the accounts of all subsidiaries of the Company of any significance. The accounts of foreign subsidiaries have been translated into United States dollars at appropriate rates of exchange. The Company's 50% joint ventures in foreign countries have not been consolidated and the investment in these ventures is carried at cost. In June, 1969, the Company acquired Proctor Chemical Company, Inc. in exchange for 105,000 shares of convertible preferred stock. This transaction has been treated for accounting purposes as a pooling of interests, and the accounts of Proctor Chemical Company, Inc. for both 1968 and 1969 are included in the accompanying financial statements.

2. The Company, in 1968, changed from the use of accelerated methods of computing depreciation to the straight line method with respect to fixed assets placed in service subsequent to January 1, 1968. The remainder of the Company's assets continue to be depreciated, in the main, on accelerated methods, principally the double declining balance method. The Company's subsidiaries use various methods of depreciation but their combined depreciation expense is not a significant portion of consolidated depreciation which, for 1969, is \$4,733,406, excluding adjustments for prior years.

3. Under the Company's loan agreements, executed in 1966, 1967 and 1969, dividend payments on its stock (other than stock dividends) are limited to earnings of the Company accumulated after December 31, 1965, the unrestricted balance of which amounts to \$19,672,659 on December 31, 1969. The Company is also required to maintain working capital in an amount not less than \$16,000,000. At December 31, 1969, \$16,825,000 is outstanding under these loan agreements and is repayable in installments from 1970 to 1975.

4. Under the Company's 1951 and 1965 Stock Option Plans for Key Management Employees, 55,441 shares of common stock were issuable under options outstanding on January 1, 1969. As a result of the Company's 3 for 2 stock distribution made on March 31, 1969, 25,710 additional shares became issuable upon exercise of outstanding options pursuant to the "anti-dilution" provisions of the 1951 and 1965 plans. During 1969, options with respect to 15,170 shares were exercised and options with respect to 559 shares were terminated. On July 28, 1969, options with respect to 1,750 shares were granted pursuant to the 1965 plan so that on December 31, 1969, options with respect to 67,172 shares are outstanding. All outstanding options are pursuant to grants made at 100% of the market price on the date of grant. There were no changes in the exercise price of outstanding options under the plans through cancellation and reissuance or otherwise, except for price changes resulting from the normal operations of the "anti-dilution" provisions of the plans.

In addition, on December 31, 1969, there are outstanding 24,550 shares of the Company's common stock restricted as to disposition for varying periods, which, together with 350 shares subsequently returned to the Company's treasury, were granted, in 1969, pursuant to the Company's Stock Ownership Incentive Plan, to certain key employees. The aggregate market value at the time of the grant of outstanding

shares has been charged to other assets and is being amortized over the years of future service estimated to be rendered by such employees.

Pursuant to the Company's Employee Stock Purchase Plan then in effect, 10,484 shares of common stock were issued to employees on May 1, 1969. The Company has another such plan currently in effect under which 12,320 shares are subscribed for on December 31, 1969.

5. The Company has several pension plans under which substantially all of its employees are eligible for coverage. The Company's policy is to fund pension cost accrued; prior service costs are amortized over 30 years. The assets of the pension funds exceed the actuarially computed value of vested benefits for all plans as of the latest valuation dates. In addition to these plans, certain subsidiaries have plans, but their combined cost is not a significant portion of consolidated pension cost which, for 1969, is \$681,528.

6. Net income includes the full amount of the United States tax credit allowed for investment in qualified depreciable property. The total credit is \$377,889 in 1969, excluding adjustments for prior years.

7. Other assets include \$1,269,710, representing the excess of cost over book value of purchased assets, and \$752,600, representing the unamortized value of restricted common stock issued to certain employees (see note 4).

8. Stockholders' equity is represented by the following:

CAPITAL STOCK:

Preferred —
No par: authorized
250,000 shares: issued 105,000 shares Convertible
Series A (see Note 9) liquidation value \$10,500,000 . . . \$ 105,000

Common —
\$.50 par: authorized
8,000,000 shares:
issued 5,868,091 shares 2,934,046
Reserved:
311,110 shares
for Stock Option and Purchase Plans
and conversion of preferred stock

PAID-IN SURPLUS 29,096,935

RETAINED EARNINGS 34,876,962

LESS TREASURY STOCK
(56,208 Common shares at cost) (1,501,340)
\$65,511,603

9. The 105,000 shares of preferred stock Convertible Series A, has a cumulative \$4.50 per share dividend rate and is convertible at a conversion price of \$45.33 per share of common stock into 231,618 shares of common stock at the option of the holders thereof. It is callable on

July 1, 1974 at \$104.50 per share and at annually reducing amounts to July 1, 1979 when it becomes callable and remains at \$100. per share. The aggregate preference on involuntary liquidation exceeds the stated value by \$10,395,000. No restriction on surplus results from this amount being in excess of stated value.

10. Changes in paid-in surplus were as follows:

Balance, January 1, 1969	\$28,798,149
Excess of proceeds over par value of common stock issued under stock option and stock purchase plans	500,813
Par value of shares issued in connection with 3 for 2 stock distribution on March 31, 1969 transferred to Common Stock account and \$32,265 cash paid for fractional shares	(1,002,117)
Excess of market value over par value of common stock issued under stock ownership incentive plan on June 11, 1969	773,150
Subsidiary company's sales of stock prior to acquisition	26,940
Balance, December 31, 1969	<u>\$29,096,935</u>

11. Certain claims are pending against the Company, but in the opinion of the Company, these matters are not expected to have a significant effect on the consolidated financial condition.

National Starch and Chemical Corporation and Subsidiary Companies
Consolidated Statement of Source and Application of Funds
 For the Year Ended December 31, 1969

Source of Funds:

Net income	\$ 8,389,990
Depreciation	4,733,406
Deferred credits	344,656
Long term debt	<u>1,053,665</u>
	<u>14,521,717</u>

Application of Funds:

Capital additions	9,095,190
Cash dividends	3,669,095
Other — net	<u>367,407</u>
	<u>13,131,692</u>

Working Capital Increase \$ 1,390,025

MAIN LAFRENTZ & CO.

280 Park Avenue, New York, N.Y. 10017

To the Board of Directors and Stockholders of

National Starch and Chemical Corporation

We have examined the consolidated balance sheet of National Starch and Chemical Corporation and subsidiary companies as of December 31, 1969, and the related consolidated statements of income, retained earnings and source and application of funds for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. With respect to certain subsidiaries, we have relied upon reports submitted by other independent public accountants, which indicate their examinations were similar in scope.

In our opinion, the consolidated statements referred to above present fairly the financial position of National Starch and Chemical Corporation and subsidiary companies as of December 31, 1969, and the results of their operations and source and application of funds for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

New York, N.Y.
 February 17, 1970

Main Lafrentz & Co.
Certified Public Accountants

Ten Year Summary of Financial Information-1960-1969

OPERATING RESULTS

Year	Net Sales	Cost and Other Expenses (net)	Earnings Before Income Taxes	Income Taxes	Net Income from Operations	Net Earnings from Operations Per Common Share*	Cash Dividends Per Common Share*	Depreciation	Cash Flow Per Common Share*
1969	\$128,057,991	\$111,790,271	\$16,267,720	\$7,877,730	\$8,389,990	\$1.37	\$.58	\$4,733,406	\$2.04
1968	125,630,958	107,261,323	18,369,635	9,046,921	9,322,714	1.54	.53	4,876,074	2.38
1967	111,882,834	97,531,751	14,351,083	6,539,802	7,811,281	1.35	.51	4,479,894	2.13
1966	105,200,030	91,023,353	14,176,677	6,541,788	7,634,889	1.32	.45	4,129,650	2.04
1965	94,856,432	82,532,407	12,324,025	5,562,137	6,761,888	1.17	.37	3,608,040	1.80
1964	83,499,340	73,176,964	10,322,376	4,969,933	5,352,443	.96	.34	2,934,708	1.66
1963	75,972,814	66,113,258	9,859,556	5,111,915	4,747,641	.86	.29	2,914,548	1.41
1962	70,566,152	61,724,425	8,841,727	4,490,943	4,350,784	.79	.26	2,861,459	1.22
1961	65,171,184	56,931,820	8,239,364	4,245,637	3,993,727	.73	.23	2,330,247	1.13
1960	54,422,732	47,808,664	6,614,068	3,371,982	3,242,086	.60	.23	1,783,900	.94

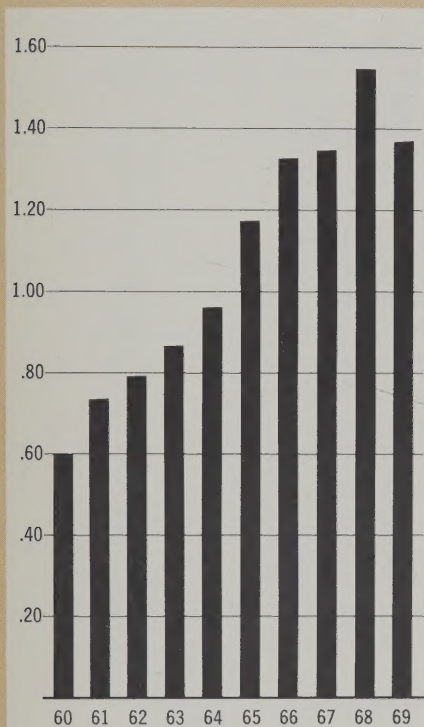
1968 and 1969 include Proctor Chemical Company, Inc.

FINANCIAL POSITION

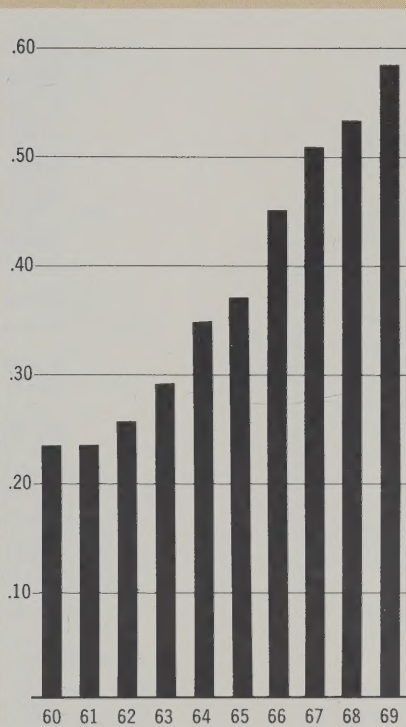
Year	Current Assets	Current Liabilities	Working Capital	Plant, Properties and Equipment—Net of Depreciation	Capital Additions	Long term Debt	Common Stockholders' Equity	Equity Per Common Share*	Current Ratio
1969	\$43,446,187	\$14,918,094	\$28,528,093	\$47,413,873	\$9,095,190	\$14,052,896	\$55,011,603	\$9.50	2.9 to 1
1968	40,924,889	13,786,821	27,138,068	42,345,327	10,951,815	12,999,231	48,996,793	8.51	3.0 to 1
1967	35,679,009	9,682,150	25,996,859	36,411,072	8,444,712	12,604,783	51,872,726	8.99	3.7 to 1
1966	33,383,476	13,129,760	20,253,716	32,451,695	10,815,248	7,701,528	46,878,556	8.13	2.5 to 1
1965	27,037,775	9,913,364	17,124,411	25,815,361	6,004,470	2,051,956	42,413,448	7.35	2.7 to 1
1964	25,700,623	10,038,111	15,662,512	23,458,376	8,950,961	2,729,699	38,063,231	6.85	2.6 to 1
1963	26,819,098	8,603,941	18,215,157	17,489,009	2,271,257	6,406,687	30,424,087	5.50	3.1 to 1
1962	21,859,359	7,355,094	14,504,265	17,699,876	5,481,800	7,185,417	26,986,220	4.91	3.0 to 1
1961	22,782,874	7,299,871	15,483,003	16,379,196	2,576,963	8,175,714	25,061,182	4.46	3.1 to 1
1960	17,075,897	4,461,356	12,614,541	15,039,645	5,445,886	8,408,796	22,342,802	4.05	3.8 to 1

*Computed on average shares outstanding during the year and adjusted for 2% stock dividends in 1960 and 1961, 3% stock dividends in 1962, 1963 and 1964, 5% stock dividend in 1968 and 3 for 2 distributions in 1965 and 1969.

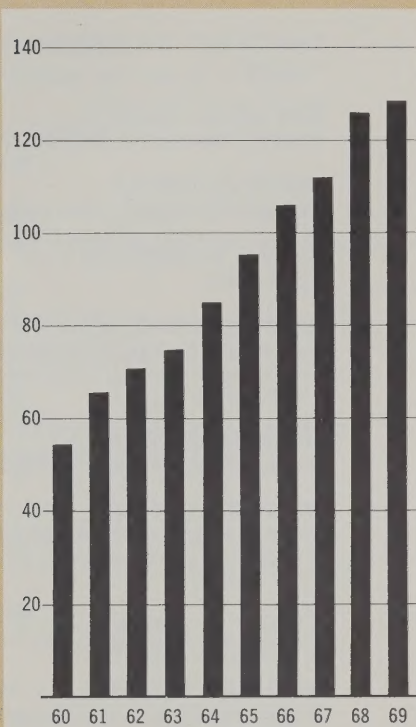
Net Earnings per Common Share
IN DOLLARS



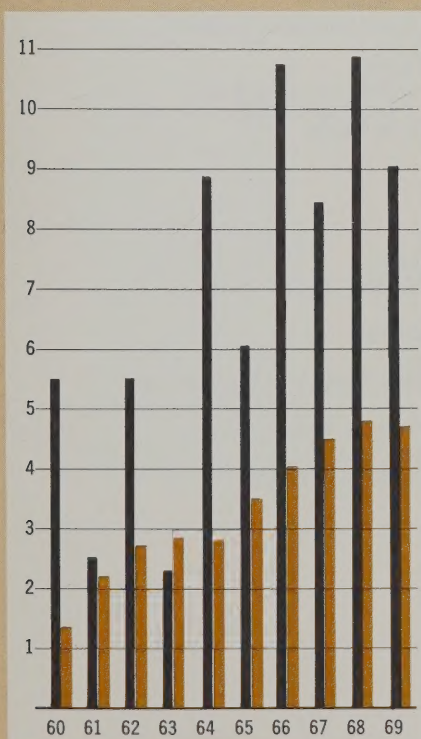
Dividends per Common Share
IN CENTS



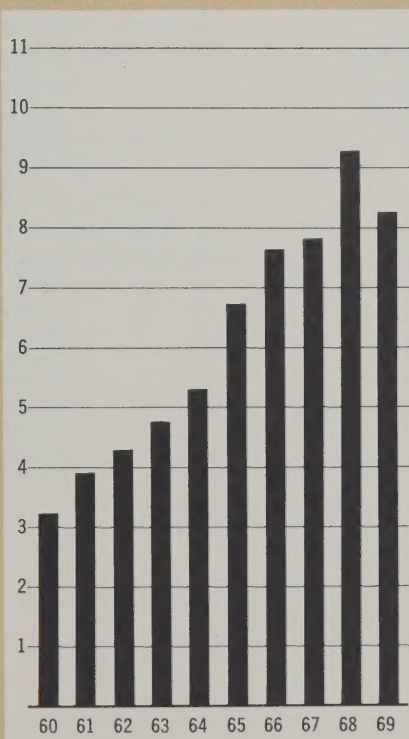
Net Sales
IN MILLIONS OF DOLLARS



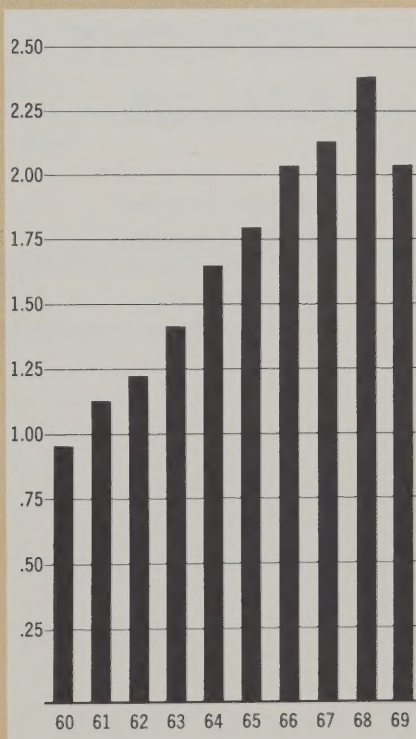
Capital Additions \$9,095,190
Depreciation 4,733,406
IN MILLIONS OF DOLLARS



Net Earnings After Taxes
IN MILLIONS OF DOLLARS



Cash Flow Per Common Share
IN DOLLARS



NATIONAL STARCH AND CHEMICAL CORPORATION

DIRECTORS

CARLYLE G. CALDWELL
President

EDWARD B. CONWAY
President, Edward B. Conway Inc., New York, N. Y.

HENRY A. CORREA
President, ACF Industries, New York, N. Y.

JOHN F. FITZGERALD
Vice President

GORDON GRAND, JR.
*President and Chief Executive Officer
Olin Mathieson Chemical Corporation
New York, N. Y.*

FRANK K. GREENWALL
Chairman of the Executive Committee

WILLIAM F. LAPORTE
*Chairman, President and Chief Executive Officer
American Home Products Corp.
New York, N. Y.*

ROBERT W. MERRITT
Executive Vice President

WILLIAM A. MITCHELL
*Retired, Formerly Chairman, The Central Trust Co.
Cincinnati, Ohio*

DONALD D. PASCAL
Chairman of the Board

OSCAR M. RUEBHAUSEN
Partner, Debevoise, Plimpton, Lyons & Gates

BERNARD H. SCHULIST
President, The Continental Bank, Cleveland, Ohio

SIDNEY F. THUNE
Executive Vice President

Honorary Directors

JOSEPH J. DANIELS
Partner, Baker & Daniels, Indianapolis, Indiana

HERBERT C. PIEL
Formerly Vice President of the Company

OFFICERS

DONALD D. PASCAL
Chairman of the Board and Chief Executive Officer

FRANK K. GREENWALL
Chairman of the Executive Committee

CARLYLE G. CALDWELL
President

ROBERT W. MERRITT
Executive Vice President, Starch Division

SIDNEY F. THUNE
Executive Vice President, Adhesive & Resin Divisions

JOHN F. FITZGERALD
Vice President, Starch Marketing

ROBERT A. BINTZ
Vice President, Starch Manufacturing

LESTER KLEMPNER
Vice President, National Accounts

HAROLD R. SAMPSON
Vice President, Employee Relations, and Secretary

BERKLEY V. SCHAUB
Vice President, International Operations

S. A. SEGAL
Vice President and Treasurer

A. G. BATTAGLIA
Assistant Vice President, Long Range Planning

J. DONALD GEORGE
Assistant Vice President, Management Services

FRANCIS L. MURPHY
Assistant Vice President, Resin Division

JOHN C. CLAY
Assistant to the Chairman of the Board

ROBERT B. ALBERT
Controller

General Counsel
Debevoise, Plimpton, Lyons & Gates

Auditors
Main Lafrentz & Co.

Transfer Agent
Morgan Guaranty Trust Company of New York

Registrar
The Chase Manhattan Bank

Annual Meeting
May 4, 1970, Hotel Biltmore, N. Y.

LOCATIONS*

Sales and Customer Service Centers

Atlanta
Baltimore
Buffalo
Canton, Mass.
Charlotte
Chicago
Cincinnati
Cleveland
Dallas-Ft. Worth
Denver
Detroit
Houston
Indianapolis
Los Angeles
Memphis
Milwaukee
Minneapolis
New Orleans
New York
No. Kansas City, Mo.
Philadelphia
Pittsburgh
Portland, Ore.
Salisbury, N.C.
Saylesville, R. I.
St. Louis
San Francisco
Seattle

Sydney, Australia
Montreal, Canada
Toronto, Canada
Vancouver, Canada
Braunston, England
Manchester, England
Slough, England
Lille, France
Lyon, France
Frankfurt, Germany
Delft, Holland
Kingston, Jamaica
Mexico City, Mexico
Benoni South, South Africa

Manufacturing Operations

Atlanta
Baltimore
Buffalo
Canton, Mass.
Chicago
Cincinnati
Dallas-Ft. Worth
Grafton, N. Dakota
Indianapolis
Long Mott, Texas
Los Angeles
Memphis
Meredosia, Ill.
No. Kansas City, Mo.
Plainfield, N. J.
Salisbury, N. C.
San Francisco
Towaco, N. J.

Sydney, Australia
Collingwood, Canada
Montreal, Canada
Toronto, Canada
Vancouver, Canada
Battersea, England
Braunston, England
Goole, England
Manchester, England
Slough, England
Lestrem, France
Lyon, France
Vecquemont, France
Delft, Holland
Kingston, Jamaica
Mexico City, Mexico
Benoni South, South Africa

Executive Offices:

750 Third Avenue, New York, N. Y. 10017

Research Center:

Plainfield, N. J.

In Australia:

Inter-National Adhesives and Resins Pty. Ltd., Sydney

In Canada:

National Starch and Chemical Co. (Canada) Ltd., Toronto
LE PAGE'S Limited, Toronto

In England:

National Adhesives and Resins Limited, Slough
Laing-National Limited, Battersea

In France:

Roquette-National Chimie, Lille
Bericol, S.A., Lyon

In Germany:

Delft-National Chemie Gmbh, Frankfurt

In Holland:

Delft-National Chemie, N. V., Delft

In Jamaica:

LE PAGE-Stacote Limited, Kingston

In Mexico:

National Starch and Chemical de Mexico,
S.A. de C.V., Mexico City

In South Africa:

Technical Adhesives & Chemical Products (Pty.) Ltd.,
Benoni South

** Includes joint ventures and associated companies.*



NATIONAL STARCH AND CHEMICAL CORPORATION